



Treatment of pension deficit funding costs in regulated charges

A REPORT PREPARED FOR UKCTA

February 2010

Treatment of pension deficit funding costs in regulated charges

1	Introduction and summary	1
1.1	<i>Report overview</i>	1
1.2	<i>Summary</i>	1
2	Regulatory framework	5
2.1	<i>Ofcom's general duties</i>	5
2.2	<i>ERG common position on remedies</i>	5
2.3	<i>Objectives of Openreach pricing framework</i>	6
2.4	<i>Openreach pricing framework</i>	7
2.5	<i>Cost based pricing</i>	8
2.6	<i>Efficiency requirements</i>	8
2.7	<i>Consistency with other Ofcom regulations</i>	10
3	BT's pension costs	13
3.1	<i>Liabilities for past pension provision</i>	13
3.2	<i>Ongoing costs</i>	15
4	Economic considerations in treatment of pension costs	17
4.1	<i>Efficiency on forward looking basis</i>	17
4.2	<i>Recovery of pension deficit costs</i>	19
4.3	<i>Recovery of different elements of pension costs</i>	25

1 Introduction and summary

This report has been prepared by Frontier Economics on behalf of UKCTA. This report addresses the economic and regulatory issues surrounding the inclusion of pension deficit funding costs in BT's regulated charges.

The focus of this report is on the economic principles of including pension costs in regulated charges. This report does not consider in detail the practical ways in which this could be implemented.

Ofcom has issued a public consultation on the treatment of BT's pension costs in determining regulated charges¹. In particular, Ofcom's consultation considers the impact of the regulatory treatment of pension costs in three areas.

1. BT's pension deficit and the associated 'repair' payments.
2. The ongoing cost of BT's pensions (in other words, the cost of making pension commitments to its current staff).
3. The link between the treatment of pension costs and the cost of capital for BT's regulated activities.

This paper focuses on the economic and regulatory principles underlying the first of these issues, the treatment of deficit repair costs.

1.1 Report overview

This paper is structured as follows:

- Section 2 gives an overview of BT and Openreach's regulatory framework;
- Section 3 describes BT's pension costs and the drivers of those costs; and
- Section 4 addresses the economic considerations of recovering the different elements of BT's pension deficit costs from regulated charges.

Section 1.2 below provides a summary of our analysis.

1.2 Summary

The treatment of pension costs should be considered in the context of BT's regulatory framework. In particular, Ofcom's statutory objectives to further the interests of UK citizens and consumers and the specific frameworks for both

¹ Ofcom, Pensions Review, 1 December 2009.

BT's and Openreach's charge controls which require charges to be based on forward looking costs in order to promote competition.

Given this framework, Ofcom should consider to what extent BT's pension costs are efficiently incurred on a forward looking basis. This is the basis on which pension costs should be included in regulated charges.

In markets where BT and Openreach have significant market power (SMP), their services are subject to *ex ante* regulatory controls. These controls range from relatively light handed measures such as the requirement not to unduly discriminate and to publish charges,² to more stringent requirements including price controls.

Typically, where cost orientation is required, it is based on underlying forward looking costs.³ In practice, this approach to cost orientation means that it is only permitted to recover the costs that a hypothetical new entrant to the market would incur.

This is consistent with the six principles of cost recovery that Ofcom draws on as part of its consultation on the pension review.⁴ These principles are:

- cost causation;
- cost minimisation;
- effective competition;
- reciprocity;
- distribution of benefits; and
- practicability.

Cost based prices mean that those who consume and benefit from the services should pay for it. Using forward looking efficient costs provides incentives to the regulated operator to minimise and costs and helps to promote competition in the market and efficient investment. Policy makers have recognised that competition (where it is feasible) is more effective than regulation in delivering benefits to consumers in terms of lower prices, increased choice and better quality. In the context of wholesale access charges, the distribution of benefits is

² For example, the SMP obligations for BT for wholesale broadband access are: to provide network access on reasonable request; not to unduly discriminate; publish a reference offer; notify charges, terms and conditions; transparency as to quality of service; and requirement to notify technical information. Source: "Review of the wholesale broadband access markets", Ofcom final explanatory statement and notification, 21 May 2008

³ Oftel define "forward looking costs" in "Pricing of telecommunications services from 1997 – consultative document", December 1995

⁴ "Pensions Review", Ofcom consultation document, published 1 December 2009

typically limited to those that directly consume the service therefore costs should be recovered from these consumers.⁵ Cost based pricing is also practicable where there are defined valuation and cost allocation methodologies – as is the case for BT.⁶

BT's pension costs fall under two main categories: i) the ongoing costs related to current employees and, ii) liabilities for past pension provision (reflected in the pension deficit). Under the current regulatory framework, ongoing costs are recoverable to the extent that they are efficiently incurred. BT's pension deficit is not recoverable from regulated charges as they are not forward looking costs. The deficit largely relates to past employees and the past provision of services.

This is in contrast to other regulated industries such as electricity networks, water wastewater where regulators have determined that at least some pension deficit costs are recoverable if they relate to costs that were efficient at the time they were incurred. In these industries, which have pure natural monopoly elements,, encouraging efficient entry or investment in competing networks is less appropriate and helps explain why regulators have adopted approaches that allow the recovery of costs that have turned out to be sub-optimal. Telecommunications networks, on the other hand, can be opened up to competition at different points of the vertical supply chain. Nevertheless, even in these sectors there is no single consistent approach to the treatment of pension deficit costs and regulators have taken account of the specific circumstances in each case.

Differences in the regulatory approach also reflect the differing regulatory duties of Ofcom and other regulators such as Ofgem, Ofwat, CAA, ORR and Postcomm. In particular, these regulators (except the CAA) have a duty to finance functions. Ofcom has no explicit duty to finance.

Allowing Openreach to recover its pension deficit costs from regulated charges would represent a significant change of the sharing of risk between BT's shareholders and Openreach's customers. It would also affect incentives on Openreach's management in terms of future efficiency, by allowing costs to be recovered that relate to past provision and not associated with forward looking costs.

⁵ This is in contrast to number portability, the context in which these principles were developed, where consumers in general benefitted indirectly from the availability of number portability to the extent that it led to increased switching, greater competition and therefore lower prices.

⁶ Reciprocity is less relevant in the context of wholesale access to downstream providers as BT typically has a wider network coverage than new entrants and therefore no need to buy wholesale access from them.

2 Regulatory framework

In order to determine how BT's pension costs should be treated when setting regulated charges, it is necessary to consider Ofcom's objective in setting *ex ante* charge controls. Ofcom sets out the objectives of the Openreach charge control in its final statement on Openreach's pricing framework.⁷

2.1 Ofcom's general duties

Under the Communications Act (2003), Ofcom's principal duty is to further the interests of citizens and of consumers, where appropriate by promoting competition. Under this Act, Ofcom has the flexibility to determine the reasonable level of prices and to determine the appropriate level of efficiency using cost accounting methods as "they think fit." In the context of the Openreach pricing framework, Ofcom wrote that other relevant considerations included:

- *"the desirability of promoting competition in relevant markets;*
- *the desirability of encouraging investment and innovation in relevant markets; and*
- *the desirability of encouraging the availability and use of high speed data transfer services throughout the United Kingdom."*

Ofcom also identified a number of regulatory principles: transparency, accountability, proportionality, consistency and targeting. These are consistent with the regulatory principles identified by the Cabinet Office. Ofcom added the need to promote the interests of consumers "in respect of choice, price, quality of service and value for money." Nevertheless, within this framework Ofcom maintains a high degree of discretion in balancing its duties and objectives.

2.2 ERG common position on remedies

In developing regulatory obligations, Ofcom also takes account of European national regulatory authorities' (NRAs') views on imposing remedies. These are documented in the European Regulators' Group (ERG) common position on remedies.⁸ This document sets out guidelines for imposing remedies in a way that contributes to the development of the internal European market and ensures

⁷ Source: "A new pricing framework for Openreach", Ofcom final statement, 22 May 2009
Available online: <http://www.ofcom.org.uk/consult/condocs/openreach/>

⁸ "Revised ERG Common Position on the adopted approach to Appropriate remedies in the new regulatory framework", ERG (06) 33, European Regulators Group, 2006. Available online: http://www.erg.eu.int/doc/meeting/erg_06_33_remedies_common_position_june_06.pdf

a consistent application of the regulatory framework under the European Commission Communications Directives.

Under these guidelines, where cost orientation is required the method used should be *“appropriate to the circumstances taking account of the need to promote efficiency and sustainable competition and maximise consumer benefits”* in order to comply with the EC Directive 2002/19/EC (Recital 20). Further, NRAs are not restricted in their choice of methodology or cost model to calculate an appropriate price except *“to apply with Article 8, general competition law and the requirement that it serves to promote efficiency, sustainable competition and maximise consumer benefits.”*

Additional guidelines were also included in the European Commission staff working document on accounting separation.⁹ This highlights the need for accounting models to be *“economically justified, consistent and meaningful in relation to the specific national circumstances”* and that *“adjustments may be necessary to remove inefficiencies or unnecessary costs”*.

The approach set out by the ERG is consistent with the current framework adopted by Ofcom.

2.3 Objectives of Openreach pricing framework

Ofcom identified the specific policy objectives of the framework as being:

- *“to promote efficiency and sustainable competition in the delivery of both broadband and traditional voice services;*
- *to provide regulatory certainty for both Openreach and its customers and to avoid undue disruption;*
- *to ensure that the delivery of the regulated services is sustainable, in that the prevailing prices provide Openreach with the opportunity to recover all of its relevant costs (where efficiently incurred), including the cost of capital; and*
- *to maintain incentives for Openreach to innovate and improve service quality.”*

In its consultation document, Ofcom also included the prevention of excessive charging and the abuse of significant market power (SMP) as an objective of the framework.¹⁰ Ofcom also described how the pricing framework needed to be

⁹ “Commission staff working document, explanatory memorandum of the Commission Recommendation on accounting separation and cost accounting systems under the regulatory framework for electronic communications”, European Commission, 19 September 2005

¹⁰ Source: A new pricing framework for Openreach, Ofcom statement, 22 May 2009. Available online:

<http://www.ofcom.org.uk/consult/condocs/openreachframework/statement/annexes.pdf>

consistent with the objectives of the Strategic Review of Telecommunications (TSR). These were to:

- *“encourage competition at the deepest level of infrastructure where it can be achieved and sustained;*
- *Ensure quality of access to enduring bottleneck assets – BT’s access and backhaul network;*
- *Reduce regulation downstream for these bottleneck assets once effective competition develops;*
- *Incentivise timely and efficient investment in new infrastructure deployments by promoting certainty in the market through a stable and consistent regulatory framework.”*

Therefore the focus of the pricing framework is on encouraging competition and providing incentives for efficient investment. In Section 4 we consider the alternative options for the treatment of pension costs against these objectives.

2.4 Openreach pricing framework

Each and every regulated charge is required to be *“reasonably derived from the cost of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed”*.¹¹ Openreach’s regulated charges are set on a glidepath determined by Ofcom so that they reach fully allocated cost (FAC) by 2012/13. The FAC of each service is calculated on a current cost accounting (CCA) basis. Ofcom concluded that using this cost basis is *“broadly consistent with achieving an efficient outcome in this case.”*¹² The price control applies without prejudice to Openreach’s obligation to set charges based on forward looking long run incremental costs (FL-LRIC).

Ofcom concluded that the costs of funding BT’s pension deficit *“do not represent forward looking costs”*, and no allowance was included for these costs. Openreach is permitted to recover the costs of the annual charge to meet the incurred future liabilities of members of the DB scheme (specifically the proportion of members relating to Openreach).

¹¹ Source: Condition FA3.1, “Review of the wholesale local access market, Identification and analysis of markets, determination of market power and setting of SMP conditions”, Explanatory statement and notification, issued 16 December 2004, Ofcom. While the 2009 Openreach pricing framework made amendments to Condition FA3, these apply without prejudice to the generality of Condition FA3.

¹² Ofcom also described the practical advantages: it is widely understood and it uses data that can be reconciled to BT’s regulatory financial statements which are audited and in the public domain.

2.5 Cost based pricing

The economic rationale for setting prices based on costs is that it allows consumers to purchase the service if they value it as much as it costs to produce it. This corresponds to the economic principle of allocative efficiency.

Furthermore, there is an economic rationale for requiring regulated cost-based prices to be based on forward-looking efficiently incurred costs. This promotes efficient competition in those elements of the infrastructure where competition is possible (in other words, where the wholesale market is contestable). This approach ensures that competitive entry can take place where the entrant is as efficient (or more efficient) than the regulated incumbent¹³. Policy makers have recognised that competition (where it is feasible) can be more effective than regulation in delivering benefits to consumers in terms of lower prices, increased choice and better quality.

If the regulated charges for monopoly infrastructure activities are based on efficient forward looking costs then this provides the correct incentives for competitive entry to the downstream market. In this case, an operator can enter the market using BT's wholesale services if it is able to earn a sufficient margin to cover its downstream network and retail costs. In other words, it helps to provide the correct incentives for efficient market entry by allowing an operator at least as efficient as BT or another retail competitor profitably to enter the downstream market.

Setting the price of wholesale services above an efficient level would discourage competition in the downstream market even though such competition would be efficient. This leads to less choice for consumers, less innovation and higher prices.

Allowing BT to recover its efficiently incurred costs also helps to provide the correct incentives for BT to invest in infrastructure and for cost minimisation. Allowing inefficient costs to be recovered through regulated charges could reduce incentives for future efficiency and innovation and result in higher costs in the monopoly elements of the business in the longer-term.

2.6 Efficiency requirements

When determining which costs should be recovered, Ofcom's requirement that costs are efficiently incurred on a forward looking basis can be interpreted as

¹³ But also, importantly, that competitive entry will only be feasible if this condition is met.

being equivalent to asking the question: What are the costs that would be incurred by a new operator entering the market today?¹⁴

This approach is consistent with the European Commission recommendation on the treatment of fixed and mobile termination¹⁵ which, we understand, applies without prejudice to any decisions that Ofcom may have made. The Commission recommends that termination rates should be based on the costs incurred by an efficient operator calculated on a bottom-up long run incremental cost (LRIC) basis which largely ignores legacy costs.¹⁶ The Commission writes that: *“In a competitive environment, operators would compete on the basis of current costs and would not be compensated for costs which have been incurred through inefficiencies. Historic cost figures therefore need to be adjusted into current cost figures to reflect the costs of an efficient operator employing modern technology. Operators which are compensated for actual costs incurred for termination have few incentives to increase efficiency.”*

In terms of relating the treatment of pension deficit costs to the Commission’s approach it is instructive to consider how these costs feed through into prices in a typical ‘competitive environment’. For example, in competitive markets, such as car manufacturing, some firms have large pension deficits and other firms do not. In these markets we do not observe, and would not expect to observe, that firms with pension deficits are able to increase prices above the equivalent level charges by the firms that do not have deficits. The Commission’s statement is therefore consistent with the treatment of historic costs that we observe in competitive markets.

Costs that were efficient at the time they were incurred may not necessarily be efficient on a forward looking basis. For example, investing in increased capacity when the best available forecasts at the time showed growth would be efficient at the time the investment was made. However, if it turned out that growth did not materialise, those costs would be judged to be inefficient on a forward looking basis. This is because an entrant to the market today would not need to recover those costs. This approach mimics the outcome in a textbook competitive market in which inefficient sunk costs cannot be recovered.

¹⁴ This is different to the interpretation of “forward looking” used by Decker, Jones and Yarrow in their report for BT. The authors interpret it as meaning “forecast” which is a much narrower interpretation.

¹⁵ Source: “Commission recommendation of 7 May 2009 on the regulatory treatment of fixed and mobile termination rates in the EU”, 2009/396/EC, Official Journal of the European Union, 20 May 2009

¹⁶ Under the *scorched earth* approach legacy costs and network topology are not considered at all. Under the *scorched node* approach, estimates of forward looking costs typically assume that certain aspects of the actual network topology would remain unchanged. Nevertheless, even under the scorched node approach, the focus is more on legacy network infrastructure and the level of costs is determined on a current cost basis rather than the level of costs historically incurred.

By only allowing forward looking costs to be recovered, this helps to ensure a level playing field between Openreach and entrants. In practice, network regulators differ in their approach to determining efficient costs. This is considered in Section 4.

2.7 Consistency with other Ofcom regulations

2.7.1 BT services subject to cost orientation

In markets where BT has SMP its services are subject to *ex ante* regulatory controls. These controls range from relatively light handed measures such as accounting separation to more stringent requirements including price controls. Typically, where cost orientation is required, the requirement applies without prejudice to other obligations such as price controls and is based on underlying forward looking costs. Examples include business connectivity products, wholesale line rental (WLR) and related services and leased lines.

For business connectivity products (including retail leased lines, wholesale symmetric broadband origination and wholesale trunk segments), BT is required to demonstrate that “each and every charge offered... is reasonably derived based on a forward looking long run incremental cost approach.”¹⁷ Where charge controls apply for individual services, these apply “without prejudice” to the cost orientation obligations. The same cost orientation obligations also apply to wholesale line rental services.¹⁸ These also apply to BT’s single transit services without any additional price controls.¹⁹

2.7.2 Mobile call termination

Mobile network operators (MNOs) with SMP are subject to price controls on fixed to mobile and mobile to mobile interconnection charges.²⁰ There is no

¹⁷ “Business connectivity market review, review of the retail leased lines, wholesale symmetric broadband origination and wholesale trunk segments and markets”, Ofcom statement and consultation, 8 December 2008.

Available online: <http://www.ofcom.org.uk/consult/condocs/bcmr08/bcmr08.pdf>

¹⁸ “Charge controls for wholesale line rental and related services”, Ofcom statement and consultation, 26 October 2009

Available online: <http://www.ofcom.org.uk/consult/condocs/wlr/wlrcondoc.pdf>

¹⁹ Source: “Fixed Narrowband Retail Service Markets : identification of markets and determination of market power”, Ofcom final statement, 15 September 2009. Available online: http://www.ofcom.org.uk/consult/condocs/retail_markets/statement/statement.pdf

²⁰ “Mobile call termination”, Ofcom statement, 27 March 2007. Available online: http://www.ofcom.org.uk/consult/condocs/mobile_call_term/statement/statement.pdf

“Mobile call termination”, Adoption of revised SMP services conditions following the Competition Appeal Tribunal’s Directions of 2 April 2009, 2 April 2009. Available online:

separate obligation for cost orientation although the regulated charges are calculated using a bottom up LRIC model. As described in Section 2.6, this approach ignores legacy costs. Further, LRIC is calculated on a CCA basis meaning that all assets are revalued. This includes the 3G spectrum costs which, as Ofcom describe, “have the potential to make a substantial contribution to the overall cost benchmarks”. Ofcom identified three potential considerations in determining the recovery of these costs:

- the need to provide appropriate price signals to end users for efficient consumption of services using mobile termination;
- the impact on MNO’s cost recovery; and
- the impact on the MNO’s incentives to use spectrum efficiently.

In this context, Ofcom placed particular weight on the first of these considerations and concluded that the impact on cost recovery should not be given disproportionate weight for the following reasons:

- the costs could be recovered from non-regulated services;
- allowing full recovery of the costs could potentially distort future spectrum awards if bidders expected Ofcom to allow them to recover the full costs; and
- market prices should not be driven by the licence fee (it should be the other way around).

Ofcom therefore included the marginal forward looking opportunity cost (MFLOC) of the spectrum in order to provide the correct signals to consumers.

http://www.ofcom.org.uk/consult/condocs/mobile_call_term/statement/CTMAmendment2009final.pdf

3 BT's pension costs

BT's pension deficit arises from its defined benefit (DB) pension scheme. Under a DB scheme the pension that a member accrues depends on years of service and salary (either final or average salary). It is the responsibility of the pension scheme to ensure that it has sufficient resources to meet these pension obligations. BT's DB scheme is a legacy from when it was publicly owned and such schemes are common to other former publicly owned utilities in the UK. We understand that BT closed its pension scheme to new members in 2001.

BT's pension costs fall under two main categories:

1. liabilities for past pension provision and
2. the ongoing costs associated with current employees.

The scale of costs under both of these categories is subject to risks. These include risks that BT has some control over (such as pension fund investment decisions or current staffing and salary levels) and risks that are beyond BT's control (for example, the expected longevity of workforce).

The rest of this section describes these costs and the risks affecting them in further detail.

3.1 Liabilities for past pension provision

BT faces costs associated with any deficit on accrued liabilities to date. These costs relate to past employment. The size of the deficit depends on the value of the assets in the fund and the expected future value of the liabilities. These, in turn, depend on the level of benefits paid to members and the life expectancy of members. This is described in further detail below.

3.1.1 Value of the pension fund

The current value of the pension fund will depend on the level of contributions made to it in the past, the payments that have been made out of it and the investment performance of the assets. BT has limited control over the payments that have been made out of it. It also has only limited control over the investment performance (see below).

What *is* in the company's control is the historic level of contributions that have been made. It is possible that a proportion of the deficit could have arisen from insufficient contributions in earlier years. We understand that BT made no

contributions to the main scheme between 1989 and 1993 even though pension liabilities continued to accrue²¹ and [REDACTED].

Returns on investment are subject to the performance of the investments that contribute to it and choices about asset allocation. Pension fund managers have a choice over the mix of equity, bonds and other investments and their choice will be affected by the maturity of the scheme (in other words, when the pension liabilities are due). In recent years, and partly in response to pension regulations, many pension fund managers have de-risked portfolios by increasing the proportion of funds investment in bonds (particularly low risk government bonds). A deficit may be partly explained by a riskier asset allocation combined with disappointing returns.

Therefore, the extent of any deficit may reflect decisions that have been made about asset allocation in the funds.

Typically, the mix of asserts in a pension portfolio will also depend on the number of members currently receiving payments. [REDACTED]

3.1.2 Level and duration of benefits paid to members

By its nature, a DB scheme commits a pension provider to future payments without any *ex ante* certainty of the level or the duration of the payments.

Under BT's DB scheme, the level of benefits paid to members is based on the final salary of employees. This will depend on factors such as the age of members when they leave employment with BT. BT has limited control over the level of benefits paid to existing members.

The duration of benefits depends on the life expectancy of members. Increasing life expectancy is impossible for any company to manage. However, fund managers are able to respond in different ways. For example, identifying this risk and quantifying its potential impact could change the types of pensions BT offers. This could lead to a move away from a DB scheme to a defined contributions (DC) scheme or by increasing the age of retirement for new members. [REDACTED]

As described by Ofcom, any of these costs relate to "*employees who no longer work for BT and employees who continue to work for BT but whose pension liability is in relation to past service*". Based on this, Ofcom conclude that these costs associated with these employees do not represent forward looking costs and that only the cost of meeting future liabilities of members should be recovered from regulated charges.

²¹ Source: "Pensions Review", Ofcom consultation document, published December 2009

3.2 Ongoing costs

The ongoing costs of BT's DB scheme are the contributions it makes to the pension fund on behalf of current employment of employees who remain members of this scheme. These form part of BT's wage costs and are therefore treated as operating costs. There will also be ongoing costs associated with other BT pension schemes (i.e. those that replaced the DB scheme).

BT is able to control its wage costs by ensuring that they are not above competitive levels and that there is no over-employment. BT therefore has some control over the contributions it makes to the scheme on behalf of employees and the contributions made by employees themselves (both in terms of the proportion of salary and the age of retirement).

In April 2009, BT reduced new pension benefits for 67,000 current employees. The changes to benefits consisted of:

- an increase in the retirement aged from 60 years to 65 years;
- a reduction in the annual benefit;
- a move from final salary to career average;
- an increase in member contributions; and
- contracting back into the State Second Pension.

To some extent, these changes reflect a move to more efficient pension provision as they will help to reduce ongoing costs and to reduce BT's incremental liabilities. Nevertheless, these changes will have no impact on historic liabilities.

4 Economic considerations in treatment of pension costs

This section sets out the economic considerations in the treatment of pension costs in regulated charges. It covers the following issues:

- the link between pension costs and promoting efficiency and effective competition;
- the relationship between regulatory treatment of pensions and the overall approach to risk sharing; and
- how regulatory approaches vary depending on the scope for competition.

We consider these in the context of Ofcom's six principles for cost recovery. In doing so we focus on the principles of cost causation, cost minimisation and effective competition, as being the most relevant principles in this context. We do not consider the principle of reciprocity as this is of limited relevance in the context of the regulation of BT's wholesale access charges since BT's network is more extensive than that of entrants. Our interpretation of the distribution of benefits principle is consistent with its use in its original context. In particular, in the case of number portability, the relevant question was who benefited from the service itself either directly or indirectly.²² Under this interpretation, this principle is of limited relevance to the question of whether BT should be permitted to recover the cost of its pension deficit from regulated charges. The practicability of recovering pension costs as this appears to be more of an accounting question than an economic one and therefore outside of the scope of this report.

Under the current pricing framework, the only costs that BT is able to recover via its regulated charges are those that are efficiently incurred on a forward looking basis. This reflects Ofcom's objectives to address competitive bottlenecks and promote competition and means that BT is not currently able to recover some of its pension deficit costs from regulated charges.

4.1 Efficiency on forward looking basis

BT's pension deficit costs are not efficiently incurred on a forward-looking basis since they relate to past labour inputs and not to the provision of services today. Allowing BT to recover these costs – either in part or in full – would increase the

²² This is in contrast to Ofcom's interpretation in its current consultation which assesses who benefitted from the cost of the pension deficit itself being incurred.

prices for wholesale products faced by entrants and this would have adverse implications for achieving Ofcom's regulatory objectives to address competitive bottlenecks and to promote competition. This is discussed in further detail below.

4.1.1 Risk of distortion of downstream competition through margin squeeze

If wholesale charges are set above the efficient cost of provision, there is a risk that an entrant to the market, purchasing wholesale inputs from BT and/or Openreach, would not be able to earn a sufficient margin to cover its downstream costs (network and retail).

This would reduce competition in downstream markets and would be against Ofcom's objectives to prevent excessive charging and the abuse of SMP by Openreach as well as Ofcom's objective to promote competition. The potential impact on end users would be less choice and higher prices. Ultimately, this could lead to fewer people using telecoms services or using such services less than is economically efficient.

This is particularly important for access to BT's access networks which are considered to be bottleneck assets as well as for increasing access to retail broadband services which is a key policy objective.

4.1.2 Distortion of efficient investment decisions

Allowing BT to set charges above the efficient cost of provision distorts 'build or buy' decisions. For example, if unbundled local loop (LLU) charges are set too high, an entrant that was less efficient than BT would be able to profitably enter the LLU market. In other words, there would be inefficient investment and inefficient competitors in the wholesale market. This leads to retail prices that do not reflect the underlying costs and therefore inefficient consumption.

The potential volatility of pension deficit costs (driven by fluctuations in the performance of the investment fund) could also create uncertainty for entrants.

4.1.3 Departure from cost causation principle

Pension deficit repair costs relate to the provision of services in the past and not to the provision of services today. Including deficit repair costs in regulated charges would mean that there will be consumers who value the product as much as it costs to produce it but are unable to buy it as the price is too high. This under-consumption means that this outcome is not economically efficient.

Even under a scorched node approach, which takes account of legacy infrastructure, typically only the cost of assets still in use are recoverable. Further, these assets are typically valued on a current cost accounting basis to reflect the cost that a new entrant would incur entering the market today. Recovering pension deficit costs would not be consistent with a scorched node

Economic considerations in treatment of pension

approach. It would allow the recovery of costs associated with inputs (i.e. the labour force) that are no longer providing services to customers.

4.2 Recovery of pension deficit costs

By allowing the recovery of efficiently incurred forward looking costs, Ofcom creates an environment in which the provision of services over the local access network is commercially viable by an efficient operator. This does not necessarily mean ensuring the commercial viability of the operator in place. In other words, if an operator is inefficient in its costs or financial structure, it is not the role of the regulator to take further steps to prevent bankruptcy.

In order to understand the differences between regulatory approaches to pension costs it is important to understand the differences between the sectors and the nature of regulation.

Other regulators in the UK, such as Ofgem and Ofwat, have allowed at least the partial recovery of deficit funding costs on based on efficient costs.²³ In Ofcom's current consultation document, it considers the approaches adopted for the recovery of pension deficit costs by a number of regulators in the UK. Ofcom finds that there is no consistency between them and there are many reasons why they differ. Differences in the regulatory approach in part reflect the differing regulatory duties of Ofcom and other regulators including Ofgem and Ofwat, as well as CAA, ORR and Postcomm.²⁴

In particular, Postcomm has a duty to finance the activities of Royal Mail and the provision of universal service. Postcomm allowed the recovery of pension deficit costs over a 17 year period.

Ofgem allows all "efficient and economic" pension deficit repair payments to be recovered from regulated charges. The defined benefits schemes of its regulated companies were guaranteed by legislation and this restricts the ability of operators to change the scheme benefits. As Ofcom note, the only other regulator this applies to is the ORR. Further, Ofgem has a duty to ensure that operators can meet consumer demand as it issues licences whereas BT does not require a licence to provide its regulated services.

²³ Source: "Price control pension principles, consultation document", Ref 120/08, Ofgem, 7 August 2008; "Price control pension principles, second consultation document", Ref 96/09, Ofgem, 31 July 2009; and "Future water and sewerage charges 2010-15: Draft determinations", Ofwat, July 2009

²⁴ Ofgem is the industry regulator for gas and energy markets in Great Britain. Ofwat is the industry regulator the water and sewerage industry in England and Wales. The Civil Aviation Authority (CAA) regulates BAA and National Air Traffic Services (NATS), the Office of Rail Regulation (ORR) regulates Network Rail and Postcomm regulates Royal Mail. Ofcom reviews the treatment of pension deficit costs by each of these regulators in its consultation document.

4.2.1 Approach to efficiency and forward looking costs

The other sector regulators also set regulated charges on the basis of efficient costs and have an objective to incentivise efficient behaviour. However, the approaches to efficient costs are different to that applied by Ofcom and different to the outcome in a competitive market. In these sectors the general approach is that utilities are permitted to recover efficient costs but that the assessment of efficiency is not purely forward looking. This means that, in order to be recoverable from regulated charges:

- all new capital and operating costs should be efficiently incurred; and
- the depreciation and return on capital relating to previous capital investments and the operating costs associated with them should only be allowed if they were efficiently incurred given the information available at the time the investment was made.

The approach adopted by other regulators potentially allows costs to be recovered even when they are no longer related to a service being provided to customers. This would be the case if pension deficit repair costs are included and highlights how much this would be a departure from Ofcom's previous approach.

The following sections consider why regulators in other sectors adopt a different approach to defining efficient costs.

4.2.2 Risk sharing and incentives for cost minimisation

Part of the explanation for the approach adopted by other regulators lies in the regulatory view of the appropriate allocation of risk between shareholders and customers. In particular, the risk that efficient investment or commercial decisions turn out, with hindsight, not to be optimal.

This issue was highlighted in the Ofgem consultation that preceded the final determination of regulatory charges for Distribution Network Operators (DNOs). The consultation discussed how not allowing electricity network operators to recover pension costs from consumers created risks for shareholders if those costs were efficient based on information at the time they were incurred. It was argued that if an operator was not able to recover costs from its customers, the operator could face a higher cost of capital to reflect the risk associated with the pension scheme. Ofgem therefore concluded that at least some of the risks associated with pension deficit costs should be passed on to consumers.

Ofgem also emphasised that its approach to the treatment of pension deficits reflected the specific circumstances that faced the electricity industry at privatisation. It stated:

Economic considerations in treatment of pension

“We previously observed that, under the current application of our pension principles, we appear to expose network companies to less risk than broadly comparable regulated companies. We acknowledge that this arises, in part, from the different regulators’ duties and responsibilities, but also the historical background, where in some industries the legacy pensions were not passed to companies at privatisation. All other economic regulators, including the Competition Commission have a policy framework that leaves shareholders of the regulated company with at least some, and in certain cases all, of the risk attached to deficit funding.”²⁵

Ofgem also identified that its approach to pension deficits could reduce the incentives upon the company to manage its pension costs in the most effective way. The principles that it has developed to deal with pension costs are partly designed to address these incentive concerns. The first of Ofgem’s principles states that:

“Customers of network monopolies should expect to pay the efficient cost of providing a competitive package of pay and other benefits, including pensions, to staff of the regulated business, in line with comparative benchmarks

Consumers should not be expected to pay the excess costs of providing benefits that are out of line with the wider private sector practice, nor for excess costs avoidable by efficient management action. We will, if appropriate, benchmark total employment costs, to ensure companies have correct incentives to manage their costs, including pension costs, efficiently.”

Furthermore, the third principle states that:

“Adjustments may be necessary to ensure that the costs for which allowance is made do not include excess costs arising from a material failure of stewardship.”

These principles recognise that allowed costs should be based on an efficient competitive benchmark and that the regulatory approach should take care not to compensate for inefficient historic decisions.

More generally, the way in which regulators approach the question of whether an operator or consumers should bear the risk of changes in costs is based on whether shareholders (who are represented by the management) of the operator are able to control those costs.

Under this approach, if management is able to control a particular cost then shareholders should bear at least some of the risk in order to provide the correct incentives to management. In particular, if management believe that costs can simply be passed on to its customers (since its customers are not able to purchase from another operator) then there is limited incentive for management to control its costs. For example, if an operator employed more people than were necessary

²⁵ Ofgem, *Price Control Pension Principles, Third Consultation*, October 2009.

(based on information available at the time) then the costs of these extra staff, in terms of wage and pension costs, should not entirely be passed on to consumers.

Allowing an operator to pass on costs that it is able to control can create perverse incentives. Specifically, allowing Openreach to recover pension deficit costs from regulated charges could create an incentive for BT to invest in a more risky portfolio since it knows that it can recover any losses from regulated charges.²⁶

If management is not able to control costs then the incentive arguments are less important and the issue for the utility regulator becomes how to determine the allocation of risk between customers and shareholders.

If customers bear the risk of increased costs then this could result in a lower cost of capital for the regulated firm. This could lead to lower prices, particularly in very capital intensive industries, although these prices would be subject to greater volatility.

It should be recognised though that allowing these costs to be borne by customers means that regulated charges would depart from the competitive benchmark. For utilities that are pure natural monopolies (such as water and distribution networks) the economic consequences of this may be limited and it may not conflict with the wider regulatory objectives.

Many of the activities of BT and Openreach do not relate to natural monopolies in the same way as these utilities. In addition, as emphasised in the Ofcom consultation, the statutory objectives of the regulators are different.

Further, allowing BT to recover the cost of its pension deficit through regulatory charges would represent a significant departure from Ofcom's previous and current regulatory framework. This could serve to reduce the incentives to BT to minimise its costs going forward as it sends a signal that Ofcom may allow other stranded costs to be included in the future.

4.2.3 Ofcom's objectives are different to those of other regulators

The framework adopted by Ofgem and the other utility regulators reflects the different objectives it has to Ofcom which, in turn, are the result of different market characteristics. The telecoms industry is not a natural monopoly and there are parts of the network which can efficiently be opened to competition. Even those elements of the telecoms infrastructure that have natural monopoly characteristics differ from the standard utility networks in that:

- customers have some degree of choice over the delivery of services (e.g. by cable or mobile); and

²⁶ This is sometimes referred to as a "moral hazard" problem.

- there are greater options for competitors to invest in their own infrastructure to connect to the natural monopoly components.

Both of these factors mean that it is more important that the regulated charges in telecoms reflect the competitive benchmark (based on efficient forward looking costs). Encouraging access to the wholesale market and creating the correct incentives for network investment helps to reduce economic bottlenecks and create competition in the market. Competition typically leads to increased choice, greater innovation and lower prices for consumers.

This is in contrast to electricity distribution networks which are typically natural monopolies meaning that competition would be economically inefficient. Instead, the focus of Ofgem is to ensure that regulated operators are able to earn a sufficient return to remain commercially viable while still providing incentives to improve efficiency.

Allowing the recovery of pension deficit costs from regulated charges represents a significant transfer of risk to Openreach's customers and could create disadvantages for them since they are limited in their ability to switch providers. There is also the possibility that Openreach's current and future customers would be paying the price of the profits enjoyed by past shareholders.

The natural monopoly characteristics of the utility networks also help explain why the regulators in these sectors have statutory duties to ensure that the utilities can 'finance their functions'. The importance of this duty to finance is discussed in the Ofcom consultation.

The inclusion of a duty to finance functions in the regulatory framework does not necessarily imply that regulated charges should be set to allow the recovery of deficit costs. It is clear from the Ofcom analysis that the regulators with the duty to finance functions have adopted different approaches to the recovery of pension deficits. Regulators have interpreted the duty as meaning that regulated charges should allow an efficiently operated company to finance its functions. The exact interpretation of what is meant by an efficiently operated company then reflects the specific circumstances of the industry. In some cases, as explained above, regulators of pure natural monopoly networks have been inclined to allow costs that were deemed efficient at the time they were incurred.

4.2.4 Link between pension funding and the cost of capital

The Ofcom consultation identifies that the existence of a defined benefit pension scheme may distort the estimate of the cost of capital for a business. This paper does not specifically consider the relationships between a defined benefit scheme and the cost of capital.

However, as stated above, regulated charges should be based on forward looking efficient costs. This principle applies as much to the cost of capital as it does to any other cost. This would suggest that the cost of capital should be based on

the financing structure of an efficient operator. If it is considered that this efficient operator would not have a defined benefit pension scheme then it would not be appropriate to set a cost of capital for an operator that included a defined benefit scheme.

4.2.5 BT is able to recover costs from non-regulated services

Another important difference between the electricity network operators and BT is that BT offers more of a mix of regulated and non-regulated products over its local access network (via its wholesale and retail divisions as well as through Openreach) whereas electricity network operators typically provide a higher proportion of regulated services over their entire networks.

The scale of the non-regulated activities raises practical considerations in applying any deficit recovery in terms of allocating the deficit between regulated and non-regulated activities. This practical issue is not considered further in this paper. However, given that the deficit arises from legacy labour costs going back many years, we expect that this allocation exercise would be far from trivial.

4.2.6 BT had a DB pension scheme at the time of its privatisation

BT's DB scheme was in place at the time of its privatisation in 1984 and this would have been known by shareholders. Therefore, investors took account of this risk in the price they paid for BT. Further Ofcom and its predecessor, Oftel, have been clear in their preference for setting regulated charges based on forward looking costs. For example, Oftel stated in 1995:

*“Oftel believes that forward looking costs are the correct basis for setting charges, because they provide more efficient signals for pricing, investment and entry than historic costs”.*²⁷

Therefore, it is open to question whether BT's shareholders would have had any expectation that BT's pension deficit costs could be recoverable from regulated charges.

4.2.7 The effect of the Crown Guarantee is uncertain

There is some uncertainty over the exact nature of the Crown Guarantee and whether it relates only to pensions earned before privatisation or whether it relates to all pensions earned by employees who were members before privatisation. **[REDACTED]** This means that it is unlikely to have any impact on the incentives of management and therefore whether or not pension deficit costs should be recoverable from regulated charges.

²⁷ “Pricing of telecommunications services from 1997 – consultative document”, December 1995

4.3 Recovery of different elements of pension costs

The previous section outlined the links between allowed recovery of pension costs, incentives for efficiency and risk allocation between shareholders and customers. The table below summarises the different elements of pension deficit costs, the level of management control over these costs and whether these costs would be efficiently incurred under a forward looking or an historic basis.

The table shows that many, but not all, of the factors that drive pension scheme deficits lie outside of the control of management. It also highlights that under a forward looking approach, deficit costs would not be recoverable from regulated charges.

Table 1. Management control over pension deficit costs

Driver of deficit	Management control	Recoverable from regulated charges?
Choice of pension scheme	No control over existing members. Potential to move to DC for new employees	No costs recoverable on a forward looking basis.
Value of pension fund		Some costs may be recoverable on an historic basis, however:
Current value of fund	Ability to make extra contributions but possible that BT has not made sufficient contributions in the past (slow to adjust longevity assumptions)	<ul style="list-style-type: none"> • it is difficult to determine whether past contributions to reducing deficit were efficient;
Investment performance	Control over choice of portfolio Limited control over performance of investments	<ul style="list-style-type: none"> • if allowances were made in regulated charges in the past then costs are not recoverable; and • if wage costs were efficiently incurred, in other words, wages were not above competitive levels and the number of staff was efficient, costs may be recoverable.
Payments to members		
Longevity	Not possible to control	
Final salary of employees	No control over final salaries (wages subject to market constraints). Scope for inefficiency if salaries are too high.	

The table below summarises the different elements of ongoing pension costs, the level of management control over these costs and whether these costs would be efficiently incurred under a forward looking or an historic basis.

Table 2. Management control over ongoing pension costs

Driver of deficit	Management control	Recoverable from regulated charges?
Contributions for existing members	Control over level of contributions made by BT and made by employees but limited by wage considerations (need to offer competitive overall wage)	Some costs recoverable on a forward looking basis.
Contributions for new members	Control over level of contributions made by BT and made by employees but limited by wage considerations (need to offer competitive overall wage)	Some costs recoverable on a forward looking basis.
Incremental liabilities	Scope to reduce payments by increasing age of retirement or using different criteria (e.g. career average salary rather than final salary)	Costs not recoverable on a forward looking basis since these would relate to past labour inputs. Some costs recoverable on an historic basis (see table above).

Frontier Economics Limited in Europe is a member of the Frontier Economics network, which consists of separate companies based in Europe (Brussels, Cologne, London & Madrid) and Australia (Brisbane, Melbourne & Sydney). The companies are independently owned, and legal commitments entered into by any one company do not impose any obligations on other companies in the network. All views expressed in this document are the views of Frontier Economics Limited.

FRONTIER ECONOMICS EUROPE

BRUSSELS | COLOGNE | LONDON | MADRID

Frontier Economics Ltd 71 High Holborn London WC1V 6DA

Tel. +44 (0)20 7031 7000 Fax. +44 (0)20 7031 7001 www.frontier-economics.com